

**Descriptions of some new species
of Parasitic Hymenoptera, chiefly from the
Sikkim Himalaya. (Hym.)**

By P. Cameron.

(Continued.)

Face and clypeus closely punctured, the front below the ocelli transversely closely striated, the rest obscurely punctured. Pro- and mesothorax closely punctured. The basal central slope of the metanotum smooth; the areola slightly wider than long, its base slightly rounded, the apex transverse; the base and apex smooth, the central part irregularly transversely striated; the posterior median area wide, of equal width, its base with some irregular longitudinal striae, the rest transversely closely striated, the rest and the pleurae closely punctured. Abdomen closely punctured, the post-petiole striated in the middle.

Comes close to *M. iridipennis* which may be known from it by the areola being longer compared to its breadth, it not being distinctly broader than long and by the posterior median area not being closely and regularly transversely striated, the striae being more irregular, fewer in number and more widely separated, the longitudinal striae on the top, too, being fewer.

7. *Myermo iridipennis* sp. nov. ♂.

Black, the areola wider than long, a stout, irregular keel down the centre, the sides depressed, the posterior median area with 2 irregular longitudinal keels; the rest sparsely, transversely striated; the face, clypeus, the mandibles, except the teeth, which are black and a brownish band behind them, the inner orbits narrowly, the lower half of the outer broadly, the edge of the pronotum, the lower edge of the propleurae, the tubercles, a broad band on the lower half of the mesopleurae, a piriform spot below the hind wings, the scutellums, 2 marks, becoming gradually narrowed towards the apex, the apex of the post-petiole, 2 large marks, obliquely narrowed on the inner side, on the apex of the 2nd segment, an inter-

rupted line on the apex of the 3rd and the apices of the 4th to 6th and the 7th entirely, pallid yellow. Legs black; the 4 front coxae and trochanters, the 4 anterior femora and tibiae in front, the greater part of the front tarsi, the basal joint of the middle below, a mark on the hinder coxae behind, a broad band on the hinder tibiae extending from near the base to shortly beyond the middle, the basal joint of the hinder tarsi except at the apex and the base of the 2nd joint, pale yellow. Wings hyaline, highly iridescent, the stigma and nervures black. — Length 10 mm.

Hab. Darjeeling.

Antennae black, serrate, the scape yellow below. Face closely, the clypeus more sparsely punctured, and closely covered with pale pubescence. Pro- and mesothorax closely punctured and thickly covered with pale pubescence. Except on the base the metanotum is more closely and strongly punctured; on the apex it is transversely striated, the sides more closely than the posterior median area. The basal depression is smooth and is bounded by 2 stout oblique keels. Post-petiole punctured, but not so closely as the other segments, its base in the centre irregularly striated; the 2nd, 3rd and 4th segments are closely punctured; the gastrocoeli obliquely striated in the centre; there is a narrow striated furrow at the base between them. — The stump of a nervure on the disco-cubital is almost obliterated; the base of the femora has a brownish hue.

8. *Myermo femorata* sp. nov. ♂.

Black, largely marked with pale yellow; the legs pale yellow, the 4 front femora black and rufous above, the hinder black, rufous at the base above, the tibiae black at the base and apex behind, the tarsi black, brownish at the base; the areola almost square, the apex transverse, the base slightly curved, the centre stoutly irregularly reticulated; the wings hyaline, the nervures and stigma black. — Length 13 mm.

Hab. Darjeeling.

Antennae stout, serrate, the underside of the scape and 7 or 8 joints beneath near the middle of the flagellum, pale yellow. Face, clypeus, the inner orbits, the lower two thirds of the outer, the mandibles broadly at the base, the edge of the pronotum, — more narrowly in the centre than at the base or apex —, the lower edge of the pronotum, the tubercles, a broad band on the lower part of the mesopleurae, a mark below the hind wings, 2 lines on the mesonotum, the scutellums, 2 large marks on the apex of the median segment on the outside, extending on to the

outer half of the spiracular area, the apex of the 1st abdominal segment, 2 large triangular marks on the apex of the 2nd, 2 longer, narrower ones on the 3rd and 4th, the apices of the 5th and 6th and the whole of the 7th, pale yellow. Head, pro- and mesothorax closely, but not strongly punctured; the median segment is more closely and strongly punctured; the posterior median area irregularly transversely striated below, above with some irregular oblique, longitudinal ones; the spiracular area is obliquely striated. The upper part of the propleurae punctured, the lower with curved striae. The raised central part of the post-petiole is stoutly longitudinally striated; as is also the base of the 2nd segment, including the gastrocoeli. The tooth of the mandibles is black; there is a brownish band behind it.

9. *Myermo robusta* sp. nov. ♂.

Black, the face, clypeus, labrum, mandibles, the inner orbits, a broad line on the lower half of the outer, the upper and lower edges of the prothorax, 2 marks on the mesonotum, the scutellums, a large mark on the lower half of the mesopleurae, a mark under the hind wings, a small irregular mark on the metapleurae near the apex, and 2 large irregular marks, extending on to the pleurae, on the apex of the median segment, the apex of the 1st abdominal segment and of all the others. — The bands on the 2nd to 5th narrowed in the centre behind, pale yellow. Legs black, the greater part of the 4 anterior in front, a broad band on the middle tibiae behind, a broad band on the base of the hinder tibiae, a large mark on the hinder coxae and the base of the hinder tarsi, yellowish-white; the basal half of the hinder femora brownish. Antennae black; the scape below, and a broad band on the flagellum white. Wings hyaline, the nervures and stigma black. — Length 13 mm.

Hab. Darjeeling.

Head and thorax closely and distinctly punctured; the basal depression on the median segment smooth, large, obliquely depressed at the base; the areola wider than long, the base and apex roundly bent backwards, not transverse, its centre with a few irregular striae; the top of the posterior median area irregularly longitudinally striated, the rest more closely, regularly striated. — Basal segments of the abdomen closely and distinctly punctured; the post-petiole longitudinally striated; the base of the 2nd segment, including the base of the gastrocoeli, stoutly longitudinally striated.

Comes close to *M. femorata* from which it may be known by the rather small areola not being transverse at the base and apex.

10. *Myermo annulipes* sp. nov. ♂.

Black; the face, clypeus, the orbits — the lower half of the outer broadly —, a line on the pronotum, the tubercles, the lower half of the mesopleurae, a mark below the hind wings, the apical half of the metapleurae, 2 lines on the mesonotum, the sides of the scutellum broadly, 2 oblique marks on the median segment, extending obliquely from near the top of the posterior median area on to the spiracular, becoming wider as they do so, the apex of the petiole and a large mark on the sides of the 2nd, 3rd, 4th and 5th abdominal segments, whitish-yellow. The 4 anterior legs are white in front, with the tarsi black; the hinder legs black, with the trochanters, a broad band on the base of the tibiae extending from near the base to shortly beyond the middle. Wings hyaline, the apex slightly smoky, the nervures and stigma black. — Length 13 mm.

Hab. Darjeeling.

Face and top of clypeus punctured, but not closely, the front smooth and shining, the vertex more opaque. Mesothorax closely, but not very strongly, punctured; the scutellum more closely than the mesonotum; the median segment is more closely and strongly punctured; the base and the areola smooth and shining; the areola small, depressed, distinctly wider than long; its base rounded bluntly, its apex more deeply backwards; the posterior median area is closely transversely rugosely punctured, the lateral areae stoutly transversely striated. Petiole smooth; the post-petiole stoutly longitudinally striated in the centre; the 2nd to 4th abdominal segments punctured; the 2nd and 3rd striated at the base; the gastrocoeli deep, their base striated irregularly.

This species may be known by the small smooth areola, by the transversely closely rugose posterior median area and by the mesopleurae being broadly yellow, as well as the sides of the sternum. The flagellum of the antennae is entirely black; the scape is yellow below.

11. *Metopius rufus* sp. nov. ♀.

Rufous; the face, palpi, the apical half of the scutellum, the post-scutellum, the apical three fourths of the 1st abdominal segment, about the apical third of the 2nd, almost the apical half of the 3rd and the apical two thirds of the 4th, orange-yellow; the base of the basal 4 segments black, the black on the 4th followed by a narrow rufous band; the other segments black, followed by a rufous band and with the apices narrowly yellow; wings hyaline; there is a cloud on

the front wings extending from the 2nd transverse cubital nervure to the apex and bounded by the cubitus below. Antennae rufous. Head and thorax covered with a white pile. — Length 12 mm.

Hab. Abu. (Nurse).

Face closely punctured, sharply margined all round. Clypeus and labrum rufous, more strongly punctured than the face and thickly covered with white hair. Mandibles rufous, with a pale mark at the base. Front and vertex closely punctured; the ocellar region black; the upper inner orbits orange-yellow; there is a sharp keel above the antennae. Pro- and mesonotum closely, distinctly punctured, the punctures becoming coarser towards the scutellum. Scutellar depression black, and bearing 3 stout central and a smaller lateral keel. The sides of the scutellum are straight; the yellow apex is smooth. On the centre of the median segment are 2 curved, narrow keels which extend to near the top of the apical slope. Legs thickly covered with white pubescence. — Pleurae closely punctured; the lower furrow on the mesopleurae is wide and shallow, and the thorax is more elongated (especially in front of the tegulae) than in the European species. There is a smooth, shining space on the sides of the median segment.

12. *Campoplex simlaensis* sp. nov. ♀.

Niger, abdominis medio late rufo; pedibus nigris, tibiis tarsisque anterioribus flavis; alis hyalinis, stigmatе nervisque nigris. — Long 10 mm.

Hab. Simla. (Nurse).

Head entirely black; except on the vertex it is entirely covered with silvery pubescence; the face and clypeus closely, uniformly and rather strongly punctured; the front and vertex are less strongly punctured. Mandibles black, covered with short, white pubescence. Scutellum closely rugosely punctured and thickly covered with long white hair. Median segment closely and uniformly punctured, thickly covered with white hair and broadly furrowed down the middle from close to the base. Propleurae smooth and shining below, above closely and distinctly punctured. Mesopleurae closely punctured; the middle slightly depressed and closely longitudinally and slightly obliquely striated on the upper two thirds. Metapleurae closely and rather strongly punctured; the upper part obscurely striated. On the base of the median segment is, on either side, a broadly rounded area. All the coxae and trochanters are black; the anterior femora are dark rufous, the

4 posterior are black; the 4 front tibiae and tarsi pallid yellow; the hinder black; the hinder calcaria are black. Wings shorter than the abdomen, clear hyaline, the stigma and nervures black; the transverse median nervure is received shortly before the transverse basal; the areolet is rounded on the top; the pedicle is nearly as long as the branches of the transverse cubitals; the apical nervures in the hind wings are faint, almost obliterated. Abdomen black; segments 3, 4 and 5 red; the 2nd rufous below.

13. *Limmeria simlaensis* sp. nov. ♂.

Nigra; abdomine late rufo; pedibus rufis, coxis trochanteribusque flavis; coxis et trochanteribus posticis late, apice tiliarum posticarum tarsisque posticis nigris. — Long 7 mm.

Hab. Simla. (Nurse).

Head black; the mandibles and palpi pallid yellow; the mandibular teeth rufous. Face and clypeus opaque, finely and closely punctured and thickly covered with short white pubescence. Front and vertex alutaceous and sparsely pilose. Thorax alutaceous; the scutellum is closely and distinctly punctured. Median segment closely punctured; the apical slope is closely, irregularly reticulated. Pleurae coarsely alutaceous; the propleurae closely striated; the meso-, with the upper part of the oblique central depression, distinctly striated. Wings clear hyaline; the nervures and stigma black; the areolet small, oblique and with a pedicle longer than it. Legs rufous; the hinder pair darker than the others; the 4 front coxae and trochanters pale yellow; the hinder coxae black, broadly yellow on the innerside and less broadly at the apex pale-yellow; the basal joint of the hinder tibiae and tarsi black; the middle tarsi fuscous. There are two distinct transverse keels on the median segment; the basal one is united to the base of the segment by a keel which bifurcates at the base. The 2nd and 3rd dorsal segments of the abdomen at the apex, the 4th at the base, the others almost entirely and their sides broadly, rufous; the ventral surface rufous, at the base yellowish.

Chalcididae.

14. *Chalcis bilobata* sp. nov. ♀.

Black, the apex of the fore femora broadly, of the 4 hinder more narrowly, the fore tibiae broadly, the base and apex of the middle, a band near the base of the hinder tibiae, their apex more broadly, the tarsi and the tegulae, yellow.

Wings hyaline, the nervures black. Apex of scutellum ending in two broad, rounded lobes. — Length fully 5 mm.

Hab. India.

Antennae somewhat shorter and stouter than usual, the flagellum covered with a microscopic down. Head, including the face, coarsely and closely punctured, the clypeus less strongly punctured; the pro- and mesopleurae more coarsely, rugosely punctured; the upper part of the meso- at the base smooth, except for a few striae; the lower part coarsely reticulated; the median segment strongly reticulated, more closely and rugosely on the pleurae than on the metanotum. The lower part of the hind coxae punctured and covered with white pubescence; the teeth on the basal half of the femora are widely separated; on the apical they are closer and smaller. — The top of the mesopleurae is smooth; below is a row of large round foveae; the depression on the mesopleurae is almost smooth in the centre, below and above striated; the mesonotum at the base is thickly covered with fuscous pubescence; the scutellum bears longer, paler hair.

15. *Chalcis marginata* sp. nov. ♂.

Black; the apices of all the femora, the tibiae, tarsi and tegulae luteous; wings hyaline, the nervures black; the apex of the scutellum with a broad rounded margin which has a slight incision in the middle; the femora with 6, moderately stout, widely separated teeth on the basal two thirds and 3 short, rounded, closely pressed ones on the apex. Centre of face and upper border of clypeus smooth and shining. — Length nearly 6 mm.

Hab. India.

Face and lower inner orbits opaque, closely rugose and thickly covered with silvery pubescence; the smooth plate in the centre is obliquely narrowed above and slightly, roundly contracted in the centre. In the centre of the clypeus is a band of large punctures. Apex of mandibles rufous. Pro-, mesonotum and scutellum closely covered with large round punctures. Apex of scutellum thickly covered with longish silvery hair. There is a row of widely separated longitudinal keels on the base of the metanotum, forming squarish areae and with a stouter keel in the centre; the rest of the median segment is coarsely reticulated. Propleurae irregularly shagreened; there is a stout, oblique keel shortly below the middle, and a shorter straighter one lower down. The central hollow of the mesopleurae is irregularly striated from near the top; the striae on the widened lower part are divided by

an irregular keel running to the bottom; the rest of the mesopleurae closely punctured.

I am not sure but that this species may be *C. amphissa* Walker from Nepal, but the description of it given by Walker is far too slight for identification. It appears to be closely allied to *C. Hearseyi* Kirby from the Calcutta District, but that has the hind tibiae black for two thirds of their length.

16. *Oncochalcis deesensis* sp. nov. ♀.

Black, the apical third of the femora, the tibiae and tarsi, except a narrow black band on the base of the hinder tibiae, and the tegulae, luteous, the wings clear hyaline, the nervures fuscous; the apex of the scutellum broadly rounded, the femoral teeth small, blunt. — Length 6 mm.

Hab. Deesa (Nurse).

Face and clypeus covered with silvery pubescence, alutaceous, with some irregular shining flat striae; the apex of the clypeus with a broad shining band, narrowed at the sides and strongly irregularly punctured in the centre. Vertex and sides of front irregularly rugosely punctured. Apex of mandibles dark rufous; the right mandibles with 3 short teeth, the left with 2, the inner being much the larger. Pronotum more closely and finely punctured than the mesonotum, which has the middle lobe more strongly and less closely than the lateral. Scutellum coarsely and closely punctured — more strongly than the mesonotum; its apex thickly covered with longish white hair; its apex with a stout rounded distinct border, which is smooth in the centre, rough on the sides. Metanotum coarsely reticulated; the base with a row of large areas; the central 2 of which are the larger and obliquely narrowed on the innerside at the apex. Propleurae closely rugose; the base of the meso-shining, smooth, with a row of large, roundish foveae at the base; the depressed part irregularly striated in the centre; the rest closely rugose and covered with white pubescence. Metapleurae coarsely, irregularly reticulated. Femoral teeth small, bluntly rounded, almost hid by white pubescence.
